WHAT IS CLAIMED IS:

1. A reflective liquid crystal display comprising:

a light pipe which emits incident light from an incident side from the other surface of its upper and lower surfaces through a light emitting means formed on the one of them;

a plane light source device with a light source arranged on one or more sides of the light pipe; and

a liquid crystal display panel having a reflective layer, wherein the light emitting side of the plane light source device and the visual recognition side of said LCD panel are bonded to each other through an adhesive layer having a refractive index lower than that of said light pipe.

2. A reflective LCD according to claim 1, wherein the refractive index of said light pipe is 1.49 or more and that of said adhesive layer is 1.48 or less.

3. A reflective LCD according to claim 1, wherein said adhesive layer has a full light transmittance of 90 % or more.

4. A reflective LCD according to claim 1, wherein said adhesive layer has a haze value of 10 % or less.

5. A reflective LCD according to claim 1, wherein said light pipe has a light emitting means on the upper surface,

and in a vertical plane to both reference planes of the lower surface and incident side, an emitting light from the lower surface has a maximum strength in a direction within 30 ° from a normal line to the reference plane of the lower surface.

6. A reflective LCD according to claim 1, wherein said light pipe has a light emitting means on the upper surface, and said light emitting means is composed of a plurality of asperities triangular in section each of which has an optical path converting plane with a tilt angle of 35 - 48 ° from the reference plane of the lower surface.

7. A reflective LCD according to claim 1, wherein said light pipe has a light emitting means on the upper surface, and said light emitting means is a repetitive structure of prism-like asperities arranged at pitches of 50 μm - 1.5 mm, each asperity composed of an optical path converting plane and a long side plane, said optical path converting plane is a slope which tilts down at angle of 35 - 48 ° from the reference plane of the lower surface from the incident side toward its opposite end and has a projected width on the reference plane of 40 μm or less and said long side plane is a slope which tilts at an angle of 0 - 10 ° from the reference plane, and has a projected width on the reference plane which is five or more time as long as that of the optical path converting plane, a difference in

angle over all long sides being within a range of 5 ° and a difference in angle to the nearest long side being within 1°.

8. A reflective LCD according to claim 6, wherein said asperities constituting of the light emitting means of the light pipe have ridges which are within a range of ± 30 ° from the reference plane of the incident side.

WHAT IS CLAIMED IS:

1. A reflective liquid crystal display comprising:

a light pipe which emits incident light from an incident side from the other surface of its upper and lower surfaces through a light emitting means formed on the one of them;

a plane light source device with a light source arranged on one or more sides of the light pipe; and

a liquid crystal display panel having a reflective layer, wherein the light emitting side of the plane light source device and the visual recognition side of said LCD panel are bonded to each other through an adhesive layer having a refractive index lower than that of said light pipe.

2. A reflective LCD according to claim 1, wherein the refractive index of said light pipe is 1.49 or more and that of said adhesive layer is 1.48 or less.

3. A reflective LCD according to claim 1, wherein said adhesive layer has a full light transmittance of 90 % or more.

4. A reflective LCD according to claim 1, wherein said adhesive layer has a haze value of 10 % or less.

5. A reflective LCD according to claim 1, wherein said light pipe has a light emitting means on the upper surface,

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and in a vertical plane to both reference planes of the lower surface and incident side, an emitting light from the lower surface has a maximum strength in a direction within 30 ° from a normal line to the reference plane of the lower surface.

6. A reflective LCD according to claim 1, wherein said light pipe has a light emitting means on the upper surface, and said light emitting means is composed of a plurality of asperities triangular in section each of which has an optical path converting plane with a tilt angle of 35 - 48 ° from the reference plane of the lower surface.

7. A reflective LCD according to claim 1, wherein said light pipe has a light emitting means on the upper surface, and said light emitting means is a repetitive structure of prism-like asperities arranged at pitches of 50 μm - 1.5 mm, each asperity composed of an optical path converting plane and a long side plane, said optical path converting plane is a slope which tilts down at angle of 35 - 48 ° from the reference plane of the lower surface from the incident side toward its opposite end and has a projected width on the reference plane of 40 μm or less and said long side plane is a slope which tilts at an angle of 0 - 10 ° from the reference plane, and has a projected width on the reference plane which is five or more time as long as that of the optical path converting plane, a difference in

angle over all long sides being within a range of 5 ° and a difference in angle to the nearest long side being within 1°.

8. A reflective LCD according to claim 6, wherein said asperities constituting of the light emitting means of the light pipe have ridges which are within a range of ± 30 ° from the reference plane of the incident side.